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September 9, 2005

VIA FACSIMILE

Mr. Edward J. Wise
McDermott Will & Emery LLP
600 13th Street, N.W.
Washington, D.C. 20005-3096
U.S.A.

U.S. Patent Application Serial No. 09/757,654
Your Ref:　054024-0026
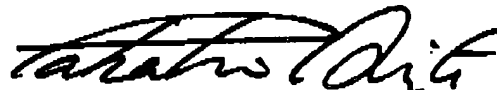Our Ref:　F26-0042-1US01

Dear Mr. Wise:

Thank you for your letter of June 29, 2005 forwarding an Official Action in regard with the above-identified application.

We request that you prepare a response in accordance with the enclosed OUR INSTRUCTIONS AND/OR COMMNETS and file the same in the U.S. Patent and Trademark Office on or before September 17, 2005, without sending the response to us for our approval.

Please feel free to contact us if you have any questions or comments.

Very truly yours,

YOSHIDA, YOSHITAKE & ARITA

Takahiro Arita

TA:im
Enclosure:　OUR INSTRUCTIONS AND/OR COMMNETS　(2 pages)

OUR INSTRUCTIONS AND/OR COMMENTS

1. Please amend the title of the invention on your side.

2. Claim Amendments

　　　· Please amend claim 1 to include the following limitations:

　　　1) having a degradation function calculating section for calculating a degradation function on the basis of a focal length, an in-focus lens position and an aperture value of an optical system;

　　　2) having a degradation-function storage unit for storing the degradation function calculated by the degradation function calculating section; and

　　　3) applying the degradation function stored in the degradation-function storage unit to obtained image data.

　　　· Please cancel claims 3, 4, 9 and 10.

3. Difference over cited references

　　　· In the Paik reference, image degradation is modeled, assuming that the image degradation in the fluxes entering each of the light sensing element is caused by the spread of the luminous fluxes which is in Gaussian Distribution, and a restoration function is applied to the image to analyze the image thus obtained.　On the other hand, in the present invention, a degradation function on the basis of a focal length, an in-focus lens position and an aperture value of an optical system picking up an image is calculated, stored, and applied to obtained image data, thereby restoring the image.　This insures high accuracy by using a degradation function intrinsic to an optical system of each

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image pick-up apparatus.   Moreover, the use of a degradation function with high accuracy results in a reduction in processing time for restoration.   In Paik, a value for each image-pickup optical system is not used, resulting in low accuracy and an increase in processing time for restoration.

· The Kawaguchi reference only describes edge enhancement of an image on the basis of an aperture value, and is not directed to image restoration.

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